Amendments to the Specification:

Please replace the paragraph starting on page 2, line 1 with the following amended paragraph:

A system of the present invention can also comprise, e.g., a sensor fusion system structured and arranged to estimate the state of the system based on the data collected by the selected sensor; memory structured and arranged to maintain a current state estimate of the system and other information that is useful in evaluating the current state of the system; [[anda]] and a communication devices structured and arranged to enable interaction by an operator with the memory. By the phrase, "structure and arranged," it is meant any suitable architecture, including source code or ~~hardwire~~ hardware, which is effective to implement the function. These functions are described in more detail below.

Please delete the following line on page 8, line 1:

[[–]] ~~What is the latest usable completion time for the measurement?~~

Please replace the paragraph starting on page 8, line 27, with the following amended paragraph:

After the information needs have been established by the mission manager, they are converted into observation functions by an Information Instantiator. This process also downselects from the set of all possible measurements to an admissible set of measurements which will satisfy the information need. The Information Instantiator maps from a particular information need established by the Mission Manager to a set of admissible observations which can satisfy the need. These observations are specified by their measurement accuracy and timeliness and represent an approximation of the capabilities of the multiplicity of sensors which are part of the sensor system, recognizing that more than one sensor may be able to perform the desired measurement. There is no attempt at this level to convert directly from an information need to a specific sensor, mode, dwell time, and/or pointing vector. This is true in general ~~for sensing system~~ for a sensing system comprised of a multiplicity of sensors. For example, the internet can be viewed as a world whose state is to be estimated by sensing it. There are multiple ways to obtain particular pieces of information and some may be more appropriate, timely, or cost effective than others. For example, the Dow Jones Industrial Average (DJIA) can be obtained from a number of wed sites or it can be computed by accessing the stock prices of each of the individual offerings. If one doesn't know where the data is, a search engine can be accessed to find it. The appropriateness and timeliness of each of these methods ~~admits of~~ admit multiple solutions for the information request with one being better than the others. Sensing a local database, even though networked, may not be appropriate since it is known that the [[DJI]] DJIA is not included in this ~~data base~~ database. That is, all web sensors may [[no]] not be able to supply the necessary information. Typical mappings are from an information need to a specification of the angular accuracy required, range accuracy, or identification certainty which must be provided by the ~~observation~~ observation.